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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/692,569

10/24/2003

Judith D. Auslander

F-736

9107

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7590

08/21/2006

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EXAMINER

NGUYEN, KIMBERLY D

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/692,569		AUSLANDER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kimberly D. Nguyen		2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

*Amendment/Response*

1. Acknowledgment is made of Response filed June 5, 2006.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-12, 14, 16-17, 19-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (US 4,864,618; hereinafter "Wright") in view of Bhatt, Bipin G. (EP 900830 A1).

Re claims 11-12, 16-17, 19-20, and 22-23: Wright teaches a system for printing an indicium on an item, the system comprising: a print head system adapted to print at least two different inks onto the item, the print head system comprising a first supply of a first ink having a first color under normal daylight and a second supply of a second different ink, the second different ink having a second color under a normal daylight which is substantially the same as the first color, and wherein the second ink comprises a fluorescent ink (see abstract, lines 7-12); and

a controller ("The printer 40 has a microprocessor unit (printer MPU) 41 which individually and uniquely controls the operation of a print head 42..." col. 8, lines 23-26) for controlling application of the first and second inks by the print head system on the item, wherein the controller is adapted to print the first and second inks in at least partially intermixed patterns

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such that the patterns of the first and second inks are substantially visually indiscernible within the indicium in normal daylight (“In the invention, an underlying and/or invisible machine readable code is printed first and may then be overprinted with the human readable postmark.” col. 12, lines 38-40; col. 12, lines 55-58, which is interpreted as partially intermixed patterns), and the second pattern of the second ink is discernible from the first pattern when subjected to fluorescent-exciting radiation (col. 12, line 27 through col. 13, line 50; col. 18, lines 67 through col. 19, line 32; col. 7, line 40 through col. 9, line 50).

Although, Wright teaches “the code can be printed with ink that is invisible in the normal light spectrum, so that it is readable only with a magnetic, infrared, or ultraviolet reader.” (col. 12, lines 44-47)

Wright does not specifically teach the invisible ink is a fluorescent ink.

Bhatt teaches an invisible ink having fluorescent property, wherein the invisible ink is invisible to the human eye when exposed to normal daylight or incandescent light conditions, yet visible as a fluorescent image when exposed to ultraviolet lighting (see Abstract).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the well-known fluorescent/invisible ink as taught by Bhatt to the teachings of Wright in order to obscure coded information in the normal light condition.

Although, Wright’s printing system/means uses an invisible ink as a second ink different from the first ink. However, Wright’s printing system/means certainly/structurally can use “the second different ink having a second color under a normal daylight which is substantially the same as the first color,” as set forth in independent claim 11, as an alternative second ink. The functionality of using “the second different ink having a second color under a normal daylight

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which is substantially the same as the first color,” instead of an invisible ink as taught by Wright, would not set the apparatus/system, as claimed in claim 11, patentable. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) and *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

Claiming a new function does not necessarily make an apparatus claim patentable. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

The examiner also respectfully submits that Wright’s reference discloses in column 19, lines 16+ (emphasis added):

“said printhead microprocessor having interface means connected to said operating means of said terminal for receiving the value indicia request input to said terminal, and print program means for controlling said printhead to print the requested value indicia as a visible indicia with visible ink from said first ink supply means on said article, for deriving an authentication code which uniquely corresponds to the requested value indicia, and for controlling said printhead to print the authentication code as an invisible indicia with invisible ink from said second ink supply means on said article, whereby said printed visible value indicia can be subsequently verified as authentic by machine reading of said invisible authentication code and comparing the authentication code for correspondence to the value indicia.”

which the printhead microprocessor, which is the controller, having print program means for controlling the printhead to print the indicia using the visible ink from the first ink supply means; and for controlling the printhead to print the indicia using the invisible ink from the second ink supply means, etc., which meet the limitation of “a controller for controlling application of the first and second inks by the print head system on the item, wherein the controller is adapted to print the first and second inks in at least partially intermixed patterns

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such that the patterns of the first and second inks are substantially visually indiscernible within the indicium in normal daylight” as set forth in independent claims.

Re claim 14: Wright teaches the print head 42 prints the coded marks in invisible ink then, in a second pass, prints the visible postmark information (col. 13, lines 23-31).

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright in view of Parkos (US 5,912,682). The teachings of Wright have been discussed above.

Re claim 13: Wright fails to teach or fairly suggest the print head system comprising at least two print heads.

Parkos teaches a print head system comprising a pair of ink jet print heads (42 in fig. 4; col. 4, lines 1-19; col. 6, line 65 through col. 7, line 15).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a printer system with a pair of print heads as taught by Parkos to the teachings of Wright in order to print desired information with unique ink characteristics by using different dedicated print head(s) for each ink, and thus speeding up the processing time when two types of the unique inks are utilized.

4. Claims 15, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright in view of Soules et al. (US 5,067,713; hereinafter “Soules”). The teachings of Wright have been discussed above.

Wright teaches the invisible machine readable code is printed first and may then be overprinted with the human readable postmark (col. 12, lines 38-40).

Wright fails to specifically teach the second/invisible ink at least partially on top of the first/visible ink.

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Soules teaches the invisible ink is overprinted on top of the visible ink (the three diamonds) (Abstract; col. 4, lines 8-23).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the invisible ink on top of the visible ink as taught by Soules to the teachings of Wright in order to provide an invisible code on any surface markings without effecting the face markings. Furthermore, it would have been an obvious expedience/variation to an ordinary to modify Wright's teaching of the invisible code overprinted with the visible code, then flip flop the visible/invisible code to achieve the desired design.

### *Response to Arguments*

5. Applicant's arguments filed June 5, 2006 have been fully considered but they are not persuasive.

6. In response to applicant's argument that

"The rejection of independent claim 11 is respectfully traversed because there is no teaching or suggestion to be found in Wright et al. for "a print head system adapted to print at least two different inks onto the item, the print head system comprising a first supply of a first ink having a first color under normal daylight and a second supply of a second different ink, **the second different ink having a second color under a normal daylight which is substantially the same as the first color**". Nor is there any teaching or suggestion to be found in Wright et al. for "a controller for controlling application of the first and second inks by the print head system on the item, wherein the controller is adapted to print the first and second inks in at least partially intermixed patterns such that the patterns of the first and second inks are substantially visually indiscernible within the indicium in normal daylight." (see page 2, 4<sup>th</sup> paragraph)

The examiner respectfully submits that:

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Although, Wright teaches “the code can be printed with ink that is invisible in the normal light spectrum, so that it is readable only with a magnetic, infrared, or ultraviolet reader.” (col. 12, lines 44-47)

Wright does not specifically teach the invisible ink is a fluorescent ink.

Bhatt teaches an invisible ink having fluorescent property, wherein the invisible ink is invisible to the human eye when exposed to normal daylight or incandescent light conditions, yet visible as a fluorescent image when exposed to ultraviolet lighting (see Abstract).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the well-known fluorescent/invisible ink as taught by Bhatt to the teachings of Wright in order to obscure coded information in the normal light condition.

Although, Wright’s printing system/means uses an invisible ink as a second ink different from the first ink. However, Wright’s printing system/means certainly/structurally can use “the second different ink having a second color under a normal daylight which is substantially the same as the first color,” as set forth in independent claim 11, as an alternative second ink. The functionality of using “the second different ink having a second color under a normal daylight which is substantially the same as the first color,” instead of an invisible ink as taught by Wright, would not set the apparatus/system, as claimed in claim 11, patentable. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) and *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).



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Claiming a new function does not necessarily make an apparatus claim patentable. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

The examiner also respectfully submits that Wright's reference discloses in column 19, lines 16+ (emphasis added):

“said printhead microprocessor having interface means connected to said operating means of said terminal for receiving the value indicia request input to said terminal, and print program means for controlling said printhead to print the requested value indicia as a visible indicia with visible ink from said first ink supply means on said article, for deriving an authentication code which uniquely corresponds to the requested value indicia, and for controlling said printhead to print the authentication code as an invisible indicia with invisible ink from said second ink supply means on said article, whereby said printed visible value indicia can be subsequently verified as authentic by machine reading of said invisible authentication code and comparing the authentication code for correspondence to the value indicia.”

which the printhead microprocessor, which is the controller, having print program means for controlling the printhead to print the indicia using the visible ink from the first ink supply means; and for controlling the printhead to print the indicia using the invisible ink from the second ink supply means, etc., which meet the limitation of “a controller for controlling application of the first and second inks by the print head system on the item, wherein the controller is adapted to print the first and second inks in at least partially intermixed patterns such that the patterns of the first and second inks are substantially visually indiscernible within the indicium in normal daylight” as set forth in independent claims. Accordingly, given its broadest reasonable interpretation, Wright and Bhatt meet the claimed limitations.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 571-272-2402. The examiner can normally be reached on Monday-Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'KDN', with a stylized, flowing script.

KDN

August 15, 2006